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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/731,479

12/10/2003

Tomohiro Inoue

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EXAMINER

CHUO, TONY SHENG HSIANG

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

11/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/731,479	Applicant(s) INOUE, TOMOHIRO	
	Examiner Tony Chuo	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/24/07 has been entered.

Response to Amendment

2. Claims 1 and 3 are currently pending. New claim 3 has been added. Newly submitted claim 3 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 1 recites an elastic body that is formed on one of the separator plates that does not require a means of a dispenser method or a screen printing method because in a product-by-process claim, the patentability of a product does not depend on its method of production. Claim 3 recites a method of assembling a component part for a fuel cell comprising the step of forming the elastic body on one of the separator plates by means of a dispenser method or a screen printing method. Therefore, claim 3 is directed to an invention that is independent or distinct from the invention originally claimed. Since applicant has received an action on the merits for the originally presented invention, this invention has

been constructively elected by original presentation for prosecution on the merits.

Accordingly, claim 3 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim 1 does not overcome the previously stated 102/103 rejection. Therefore, claim 1 stands rejected under the following 102/103 rejection. In addition, claim 1 is also rejected under the following new 103 rejection.

Claim Rejections - 35 USC § 102/103

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bernacki (US 2004/0038109). The Bernacki reference discloses a component part for a fuel cell comprising: a pair of bipolar plates "10" which are arranged in parallel to each other in a state of having a gap between

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contact surfaces thereof opposing to each other; a gasket "18" arranged in a gasket groove, which is provided in both of the bipolar plates, and bonded to the plates by an adhesive, wherein the gasket is made of an elastic material such as rubber (See paragraphs [0017],[0018],[0019], and Figure 3). It also discloses a gasket that has an initial height that is greater than the groove gap of the gasket groove, wherein the bipolar plates are compressed so that the contact surfaces are closely contacted with each other and then the gasket is compressed in the gasket groove so that a height of the gasket is equal to the groove gap (See Figures 3 and 4).

Examiner's note: It has been held that the discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art. *In re Boesch*, 205 USPQ 215 (CCPA 1980). The initial height of the gasket and the height of the groove gap are results effective variables of varying the compressive force applied by the gasket on the separator plate in order to effectively form a seal between the separator plates.

It is noted that the instant claim is being construed as product-by-process and that the product itself does not depend on the process of making it. Accordingly, in a product-by-process claim, the patentability of a product does not depend on its method of production. In that, it is further noted that the product in the instant claim is the same as or obvious over the product of the prior art. Therefore, the claim is anticipated by Bernacki. However, if the claim is not anticipated, the claim is obvious as it has been held similar products claimed in product-by-process limitations are obvious (*In re Brown*

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173 USPQ 685 and In re Fessman 180 USPQ 324, See MPEP 2113: Product-by-Process claims).

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernacki (US 2004/0038109) in view of Wald et al (US 2003/0211378).

The Bernacki reference discloses a component part for a fuel cell comprising: a pair of bipolar plates "10" which are arranged in parallel to each other in a state of having a gap between contact surfaces thereof opposing to each other; a gasket "18" arranged in a gasket groove, which is provided in both of the bipolar plates, and bonded to the plates by an adhesive, wherein the gasket is made of an elastic material such as rubber (See paragraphs [0017],[0018],[0019], and Figure 3). It also discloses a gasket that has an initial height that is greater than the groove gap of the gasket groove, wherein the bipolar plates are compressed so that the contact surfaces are closely contacted with each other and then the gasket is compressed in the gasket groove so that a height of the gasket is equal to the groove gap (See Figures 3 and 4).

However, Bernacki does not expressly teach an initial height h of the elastic body that is set to be 105% to 130% of a groove gap d_2 of the gasket groove. The Wald reference discloses a gasket material for a fuel cell membrane assembly that is compressed at between 5% and 25% which represents a gasket material that has an initial height of 105% to 133% of the compressed height which is the height of the groove gap d_2 (See paragraph [0054]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bernacki component part to include a gasket that

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is made of an elastic body wherein an initial height h of the elastic body is set to be 105% to 130% of a groove gap d_2 of the gasket groove in order to effectively seal the gases within the separator plates (See paragraph [0054]).

Response to Arguments

7. Applicant's arguments filed 9/24/07 have been fully considered but they are not persuasive.

The applicant argues that Bernacki does not disclose nor suggest that the gasket is bonded to both separators as required by the pending claim 1. As support for the assertion that it is known in the art that a gasket is bonded to both separator plates with adhesive, the examiner would like to cite Uchida et al (US 6316139) as evidence to support that assertion. Uchida et al discloses a gasket "23" that is bonded to both separator plates "2" by using adhesive layers "22" (See Figures 1A and 1C). Therefore, it is contended by the examiner that the present invention is the same as or obvious over the Bernacki fuel cell.

The applicant also argues that there is no disclosure or suggestion in Bernacki that the gasket is formed by dispenser method or screen printing method and that a product-by-process claim that defines different structures as a result of the process of making the product should be considered for all of its limitation. This argument is not persuasive because the applicant has not shown how the structure of the gasket is different as a result of the dispenser method or screen printing method. Therefore, the limitation "formed by a dispenser method or screen printing method" is not given

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patentable weight because other methods of forming the gasket would also result in the same structure.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Chuo whose telephone number is (571) 272-0717. The examiner can normally be reached on M-F, 7:00AM to 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TC


JONATHAN CREPEAU
PRIMARY EXAMINER